

Facility Name: HARSHAW CHEMICAL CO. AKA ENGELHARD CORP  
Facility ID: 02-47-04-0195  
Emissions Unit: PK BLENDER #2 (E-103) (P099)

### Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: PK BLENDER #2 (E-103) (P099)

Activity Description: 65 Cubic Foot PK Blender

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
65 cubic foot PK blender #2 with a fabric filter baghouse and a wet scrubber	OAC rule 3745-17-11(B)(1)	Emissions of particulate matter shall not exceed 3.48 pounds per hour
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule

##### 2. Additional Terms and Conditions

None

##### II. Operational Restrictions

None

##### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

##### IV. Reporting Requirements

1. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stacks serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.



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**V. Testing Requirements**

1. Compliance with the particulate matter emission limitation of 3.48 pounds per hour shall be determined in accordance with OAC rule 3745-17-03(B)(10). No testing is specifically required by this permit but, if appropriate, may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than those required by the visible emissions limit in Section A.I.
2. Compliance with the visible emission limitation shall be determined by using U.S. EPA Method 9, if required by the Ohio EPA.

**VI. Miscellaneous Requirements**

**None**



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**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
65 cubic foot PK blender #2 with a fabric filter baghouse and a wet scrubber	OAC 3745-31-05 PTI 02-11383	Emissions of particulate matter from fabric filter baghouse shall not exceed 0.01 gr/dscf of exhaust gases and 0.17 lb/hr.  Emissions of particulate matter from scrubber shall not exceed 0.03 gr/dscf of exhaust gases and 0.25 lb/hr.  Total particulate matter emissions shall not exceed 1.88 tpy.  Visible particulate emissions shall not exceed 5% opacity as a six-minute average.

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

1. The collection efficiency of the air pollution capture hoods for emissions unit P099 shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at all points of capture. Applicant shall maintain all hoods and enclosures in good operating condition. The collection efficiency shall be considered adequate if visible particulate emissions of fugitive dust do not exceed 20% opacity as a three-minute average.
2. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 2 inches of water at all times while the emissions unit is in operation.  
  
The scrubber water flow rate shall be continuously maintained at the value (gallons per minute) recommended by the manufacturer at all times while the emissions unit is in operation.
3. The pressure drop across the baghouse shall be maintained within the range of 3 to 5 inches of water while the emissions unit is in operation.



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### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information once each day:

- a. The pressure drop across the scrubber, in inches of water.
  - b. The scrubber water flow rate, in gallons per minute.
2. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels:
  - a. The static pressure drop across the scrubber.
  - b. The scrubber water flow rate.
2. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

### V. Testing Requirements

1. Compliance with the emission limitations in section B.I of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limit for PM: 0.01 gr/dscf of exhaust gases from fabric filter and 0.17 lb/hr

Applicable compliance method: Compliance with the above limitation shall be demonstrated by stack testing using the procedures of U.S. EPA reference Method 5, if required by the Ohio EPA.

- b. Emission Limit for PM: 0.03 gr/dscf of exhaust gases from scrubber and 0.25 lb/hr

Applicable compliance method: Compliance with the above limitation shall be demonstrated by stack testing using the procedures of U.S. EPA reference Method 5, if required by the Ohio EPA.

- c. Emission Limit: 1.88 tons per year PM

Applicable compliance method: Compliance with the above limitation shall be demonstrated by calculations, using the design control efficiency of the fabric filter and the amount of material collected by the fabric filter.

- d. Emission Limit: Visible emissions not to exceed 5% opacity as a six-minute average from any stack

Applicable compliance method: Compliance with the above limitation shall be demonstrated by U.S. EPA reference Method 9.

2. Compliance with the visible emission limitation in section B.II of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limit: Visible emissions not to exceed 20% opacity as a three-minute average

Applicable compliance method: Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

